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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,077	01/21/2004	Mervin G. Wood	II/2-22829/A/CGC 2141	4619

324 7590 02/01/2005

CIBA SPECIALTY CHEMICALS CORPORATION
PATENT DEPARTMENT
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EXAMINER	
KLEMANSKI, HELENE G	

ART UNIT	PAPER NUMBER
1755	

DATE MAILED: 02/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/762,077	WOOD ET AL.	
	Examiner	Art Unit	
	Helene Klemanski	1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-27 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-27 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/26/04&6/4/04.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 18 is objected to because of the following informalities: in claim 18, line 2, the term "amie" should be replaced with the term "amine". Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-27 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 16, 30 and 32-38 of copending Application No. 10/782,524 (US 2004/0210056). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 1-3, 20, 21 and 25-27 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of copending Application No. 10/735,319 (US 2004/0126510). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said patent claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1-3, 20, 21 and 25-27 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No. 10/466,034 (US 2004/0074417). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said patent claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

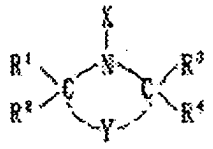
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 13, 14, 20, 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Moffatt ('409).

Moffatt ('409) teaches an ink jet ink composition comprising an amine oxide surfactant such as N,N-dimethyl-N-dodecyl amine oxide, N,N-dimethyl-N-tetradecyl amine oxide, N,N-dimethyl-N-hexadecyl amine oxide, N,N-dimethyl-N-octadecyl amine oxide and N,N-dimethyl-N-(Z-9-octadecenyl) amine oxide. The addition of the amine oxide surfactant alleviates color bleed (i.e. stabilizes) between inks used in thermal ink jet printers. See col. 2, lines 23-35, col. 3, lines 32-50 and 65-66, col. 4, lines 4-27, Table I, Table III; examples 1, 4-11, 13-21 and 25-33 and claims 1-3, 6 and 13-16. The ink jet ink composition as taught by Moffatt ('409) appears to anticipate the present claims.

8. Claims 1-5, 20-23 and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by JP11/170686.

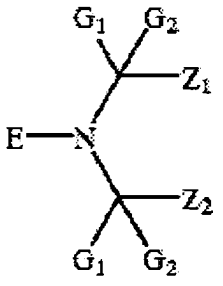
JP11/170686 teaches a recording liquid for ink jet recording or an ink jet recording paper comprising a water-soluble hindered amine compound of the formula



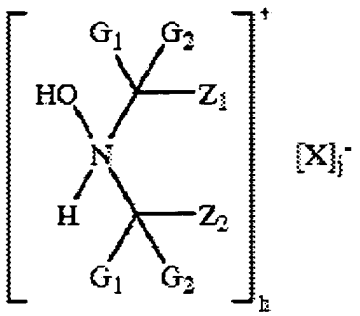
wherein Y is a group of nonmetal atoms necessary to complete a five- to seven-membered ring; X is an oxy radical, alkoxy group, aryloxy group or hydroxy group; R^1, R^2, R^3 and R^4 are independently H or alkyl and wherein the compound has an anionic water-soluble group. The recording liquid contains the hindered amine compound in an amount of 0.1-20 wt%. The recording liquid may further comprise an UV absorber such as a benzotriazole or benzophenone compound. See pages 2 and 3, pages 5-11, page 24 and page 31 of the English translation provided by applicants. The recording liquid for ink jet recording or an ink jet recording paper as taught by JP11/170686 appears to anticipate the present claims.

9. Claims 1-3 and 20-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Seltzer et al.

Seltzer et al. teach a composition having reduced loss of brightness and enhanced resistance to yellowing which comprises pulp or paper which still contains lignin and an effective stabilizing amount of a hindered amine compound of the formula



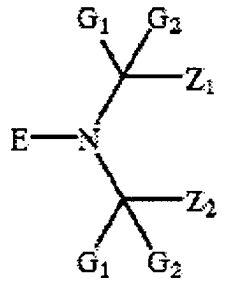
or



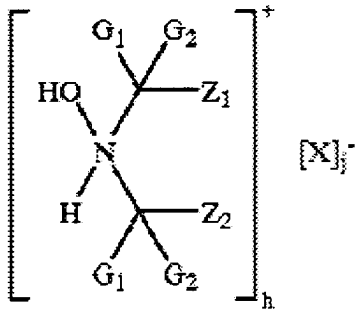
wherein G_1 and G_2 are independently C_{1-4} alkyl or together are pentamethylene; Z_1 and Z_2 are each methyl or Z_1 and Z_2 may together form a linking moiety which may be substituted by an ester, ether, hydroxy, oxo, cyanohydrin, amide, amino, carboxy or urethane group; E is oxyl; X is an inorganic or organic anion such as phosphate, phosphonate, carbonate, bicarbonate, nitrate, chloride, bromide, bisulfite, sulfite, bisulfate, sulfate, borate, formate, acetate, benzoate, citrate, oxalate, tartrate, acrylate or polyacrylate and the total charge of cations h is equal to the total charge of anions j. The effective stabilizing amount of the hindered amine compound is 0.001-5% by weight based on the pulp or paper. The composition may further comprise UV absorbers such as benzotriazoles, s-triazines, benzophenones, α-cyanoacrylates, oxanilides, benzoxazinones, benzoates and α-alkyl cinnamates. It is preferable that the paper or pulp is chemimechanical or thermomechanical pulps or papers (i.e. recording mediums). See col. 3, line 23 – col. 3, line 17, amine compounds (A) –(EE*), col. 19, line 47 – col. 21, line 21, col. 30, lines 16-19 and lines 56-65, the examples and claims 1-21, 36 and 37-40. The composition as taught by Seltzer et al. appears to anticipate the present claims.

10. Claims 1-3 and 20-27 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 02/055618.

WO 02/055618 teaches an ink-jet ink, an ink-jet recording material or an ink-jet system comprising at least one water-soluble hindered amine compounds of the formula



or



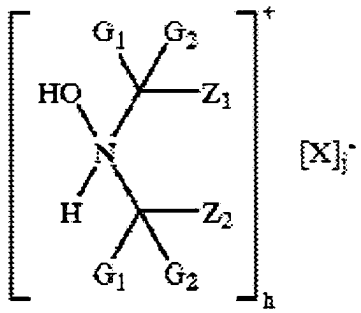
wherein G_1 and G_2 are independently C_{1-4} alkyl or together are pentamethylene; Z_1 and Z_2 are each methyl or Z_1 and Z_2 may together form a linking moiety which may be substituted by an ester, ether, hydroxy, oxo, cyanohydrin, amide, amino, carboxy or urethane group; E is oxyl; X is an inorganic or organic anion such as phosphate, phosphonate, carbonate, bicarbonate, nitrate, chloride, bromide, bisulfite, sulfite, bisulfate, sulfate, borate, formate, acetate, benzoate, citrate, oxalate, tartrate, acrylate or polyacrylate and the total charge of cations h is equal to the total charge of anions j. The compounds can be used either in the ink jet material or in at least one ink jet ink or

in both. The total amount of the compound in the material is 1-10000 mg/m^2 and the total amount in the ink jet ink is 0.1-20% by weight. The ink compositions and the ink jet recording materials may further contain UV absorbers such as benzotriazoles and phenyltriazine classes. See pages 1-31, pages 35-37, pages 38-41, pages 44-46, the examples and claims 1-18. The ink-jet ink, ink-jet recording material and ink-jet system as taught by WO 02/055618 appears to anticipate the present claims.

11. Claims 1-3 and 20-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Wood et al. (US 2004/0126510).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Wood et al. (US 2004/0126510) teach an ink-jet ink, an ink-jet recording material or an ink-jet system comprising at least one water-soluble sterically hindered N-hydroxylamine strong acid salt of the formula



wherein G_1 and G_2 are independently C_{1-4} alkyl or together are pentamethylene; Z_1 and Z_2 are each methyl or Z_1 and Z_2 may together form a linking moiety which may be substituted by an ester, ether, hydroxy, oxo, cyanohydrin, amide, amino, carboxy or urethane group; X is an anion of a strong acid such as phosphate, phosphonate, carbonate, bicarbonate, nitrate, chloride, bromide, bisulfite, sulfite, bisulfate, sulfate, borate, formate, acetate, benzoate, citrate, oxalate, tartrate, acrylate or polyacrylate and the total charge of cations h is equal to the total charge of anions j or comprising at least one dialkyl N-hydroxylamine salt of the formula

$(R_{51}R_{52}N\text{-}OH)\cdot(HY)$

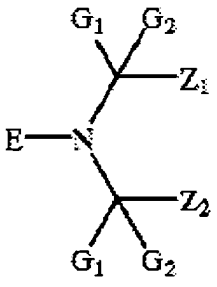
wherein R_{51} is an unsubstituted or substituted C_{1-36} alkyl, an unsubstituted or substituted C_{5-12} cycloalkyl, an unsubstituted or substituted C_{7-9} aralkyl wherein the substituents are C_{1-12} alkyl, halogen, cyano, $E_{41}O$-, $E_{41}CO$-, $E_{41}OCO$-, $E_{41}COO$-, $E_{41}S$-, $E_{41}SO$-, $E_{41}SO_2$-, $-NH_2$, $-NHE_{41}$, $-NE_{41}E_{42}$, $-PO(OE_{41})(OE_{42})$ or $OPO(OE_{41})(OE_{42})$ groups; E_{41} and E_{42} independently are H, C_{1-4} alkyl or C_{1-4} alkyl substituted by 1-3 hydroxyl groups; R_{52} is H or independently has the same meaning as R_{51} and R_{52} contains a hydrogen alpha to the –NOH moiety or R_{51} and R_{52} together form a C_{2-12} heterocyclic ring which contains at least one carbon substituted hydrogen alpha to the –NOH moiety and HY is an inorganic or organic acid. The compounds can be used either in the ink jet material or in at least one ink jet ink or in both. The total amount of the compound in the material is 1-10000 mg/m^2 and the total amount in the ink jet ink is 0.1-30% by weight. The ink compositions and the ink jet recording materials may further contain UV absorbers such as hydroxyphenylbenzotriazoles, triaryl-s-triazine, benzophenones, α-cyanoacrylates,

oxanilides, benzoxazinones, benzoates and α-alkyl cinnamates. See para 0002, paras. 0012-0027, para. 0038, amine compounds (A*) –(DD*), paras. 0164-0169, paras. 0192-0194, para. 0201, paras. 0219-0247, the examples and claims 1-4 and 7-22. The ink-jet ink, ink-jet recording material and ink-jet system as taught by Wood et al. (US 2004/0126510) appears to anticipate the present claims.

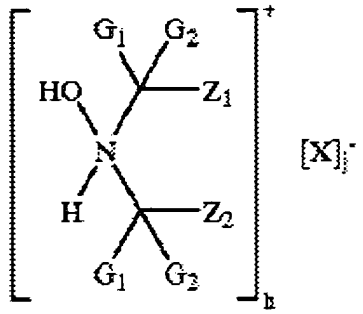
12. Claims 1-3 and 20-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Biry (US 2004/0074417).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Biry (US 2004/0074417) teaches an ink-jet ink, an ink-jet recording material or an ink-jet system comprising at least one water-soluble hindered amine compound of the formula



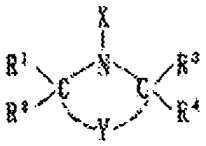
or



wherein G_1 and G_2 are independently C_{1-4} alkyl or together are pentamethylene; Z_1 and Z_2 are each methyl or Z_1 and Z_2 may together form a linking moiety which may be substituted by an ester, ether, hydroxy, oxo, cyanohydrin, amide, amino, carboxy or urethane group; E is oxyl; X is an inorganic or organic anion such as phosphate, phosphonate, carbonate, bicarbonate, nitrate, chloride, bromide, bisulfite, sulfite, bisulfate, sulfate, borate, formate, acetate, benzoate, citrate, oxalate, tartrate, acrylate or polyacrylate and the total charge of cations h is equal to the total charge of anions j. The compounds can be used either in the ink jet material or in at least one ink jet ink or in both. The total amount of the compound in the material is 1-10000 mg/m^2 and the total amount in the ink jet ink is 0.1-30% by weight. The ink compositions and the ink jet recording materials may further contain UV absorbers such as benzotriazoles and phenyltriazine classes. See paras. 0005-0040, compounds (A)-(IIIc), paras. 0041-0218, paras. 0242-0288, paras. 0312-0336, paras. 0338-0340, para. 0347, para. 0365, the examples and claims 1-18. The ink-jet ink, ink-jet recording material and ink-jet system as taught by Biry appears to anticipate the present claims.

13. Claims 1-3, 20 and 22-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Oki et al. (US 2002/0050226).

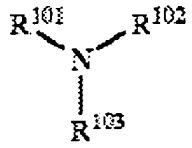
Oki et al. (US 2002/0050226) teach an aqueous ink composition comprising a colorant, a water-soluble organic solvent and a compound of the formula



wherein Y is a group of nonmetal atoms necessary to complete a five- to seven-membered ring; X is an oxy radical, alkoxy group, aryloxy group or hydroxy group; R^1, R^2, R^3 and R^4 are independently H or alkyl with the proviso that any two of R^1 to R^4 and Y may be connected to each other to form a 5- to 7-membered ring and wherein the compound has an anionic water-soluble group. The recording liquid contains the hindered amine compound in an amount of 0.05-10 wt%. The recording liquid may further comprise an UV absorber such as a benzophenone or cyano acrylate based compound. See paras. 0022-0023, para. 0032, paras. 0038-0040, para. 0042, para. 0053, paras. 0058-0060, para. 0069, para. 0130, compounds 1-32, Table 1, para. 0167, Table 2, example B1, para. 0191, Table 4 and 5, Table 7 and claims 1, 5-7, 14, 19 and 20. The aqueous ink for ink jet recording as taught by Oki et al. (US 2002/0050226) appears to anticipate the present claims.

14. Claims 1-5, 20, 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Omatsu et al. (US 2003/0097959).

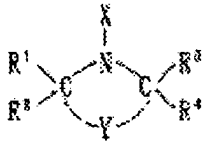
Omatsu et al. (US 2003/0097959) teach an aqueous ink jet recording ink composition comprising an azo dye and 2-200 parts by mass based on 100 parts by mass of the dye of a compound of the formula



wherein R^{101} and R^{102} are independently H, an aliphatic group or an aromatic group and R^{103} is a hydroxy group or any pair of R^{101} and R^{102} may be coupled to form a 5- to 7-membered ring. The ink can further contain an antifading agent such as a benzotriazole. See paras. 0012-0015, paras. 0115-0119, compounds (I-63) and (I-64), paras. 0127-0128, Table 15; Ink set 114, paras. 0203-0204 and claim 1. The aqueous ink for ink jet recording as taught by Omatsu et al. (US 2003/0097959) appears to anticipate the present claims.

15. Claims 1-5, 20, 21 and 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Oki et al. ('597).

Oki et al. ('597) teach an ink-jet ink and/or an ink-jet recording medium containing a receiving layer comprising a compound of the formula

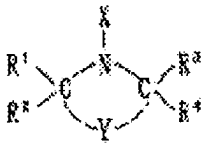


wherein Y is a group of nonmetal atoms necessary to complete a five- to seven-membered ring; X is an oxy radical, alkoxy group, aryloxy group or hydroxy group; R^1, R^2, R^3 and R^4 are independently H or alkyl with the proviso that any two of R^1 to R^4 and Y may be connected to each other to form a 5- to 7-membered ring and wherein the compound has an anionic water-soluble group. The recording liquid contains the

hindered amine compound in an amount of 0.05-10 wt% and the recording medium contains the compound in an amount of 0.01-10 wt% in relation to the total weight of the receiving layer. The ink receiving layer may further contain UV absorbing agents. See col. 2, lines 18-25 and 42-47, col. 3, lines 4-11 and 27-31, col. 5, lines 9-31, col. 5, line 67 – col. 6, line 3, col. 6, lines 18-20, compounds (1-1) and (1-3)-(1-10), col. 8, lines 14-15, col. 12, lines 36-49, col. 13, lines 58-62, Table 1; Ink Compositions 1,2, 6 and 7, col. 15, lines 38-43, Table 2, col. 17, lines 15-17 and 48-49, Table 3; Recording mediums a and b, Table 4 and claims 1, 2, 4-6, 10, 11 and 14-21. The ink-jet ink and/or an ink-jet recording medium containing a receiving layer as taught by Oki et al. ('597) appear to anticipate the present claims.

16. Claims 1-5, 20, 21 and 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Oki et al. ('735).

Oki et al. ('735) teach an aqueous ink composition comprising a colorant, a water-soluble organic solvent and a hindered amine compound of the formula

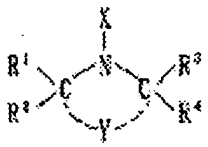


wherein Y is a group of nonmetal atoms necessary to complete a five- to seven-membered ring; X is an oxy radical, alkoxy group, aryloxy group or hydroxy group; R^1, R^2, R^3 and R^4 are independently H or alkyl with the proviso that any two of R^1 to R^4 and Y may be connected to each other to form a 5- to 7-membered ring and wherein the compound has an anionic water-soluble group. The compound stops the progress of photo-oxidation reaction of colorants to inhibit photo-deterioration thereof and is

therefore is considered a light stabilizer. The recording liquid contains the hindered amine compound in an amount of 0.01-5 wt%. The recording liquid may further comprise an UV absorber such as a benzophenone or cyano acrylate based compound. See col. 4, lines 20-45, col. 5, lines 2-4 and 52-54, col. 6, lines 40-54, col. 7, lines 7-21 and 52-54, col. 9, lines 13-45, col. 11, lines 24-25, compounds 1-18, 23-26 and 33, Table 1; Examples A1-A5, col. 29, lines 56-57, col. 31, lines 40-43, examples B1-B3, col. 33, lines 10-11, Table 4; Examples C1 and C3, Table 7; examples D1-D5 and D7 and claims 1-5, 9-11 and 15-19. The aqueous ink for ink jet recording as taught by Oki et al. ('735) appears to anticipate the present claims.

17. Claims 1-5, 20, 21 and 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Oki et al. (US 2004/0011249).

Oki et al. (US 2004/0011249) teach an ink-jet ink and/or an ink-jet recording medium containing a receiving layer comprising a compound of the formula

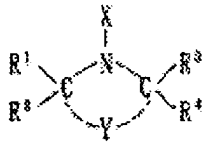


wherein Y is a group of nonmetal atoms necessary to complete a five- to seven-membered ring; X is an oxy radical, alkoxy group, aryloxy group or hydroxy group; R^1, R^2, R^3 and R^4 are independently H or alkyl with the proviso that any two of R^1 to R^4 and Y may be connected to each other to form a 5- to 7-membered ring and wherein the compound has an anionic water-soluble group. The recording liquid contains the hindered amine compound in an amount of 0.05-10 wt% and the recording medium contains the compound in an amount of 0.01-10 wt% in relation to the total weight of the

receiving layer. The ink receiving layer may further contain UV absorbing agents. See para. 0011, para. 0013, paras. 0018-0020, para. 0025, paras. 0042-0048, compounds (1-1) and (1-3)-(1-10), para. 0050, para. 0070, paras. 0074-0076, para. 0086, Table 1; Ink Compositions 1,2, 6 and 7, para. 0097, Table 2; Ink Compositions 1 and 2, paras. 0116-0118, Table 3; Recording mediums a and b, para. 0120, Table 4 and claims 1, 2, 6-8, 12-18, 21, 22 and 23. The ink-jet ink and/or an ink-jet recording medium containing a receiving layer as taught by Oki et al. ((US 2004/0011249) appears to anticipate the present claims.

18. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Kitamura et al. (US 2003/0070582).

Kitamura et al. (US 2003/0070582) teach an ink-jet ink and/or an ink-jet recording medium containing a receiving layer comprising a compound of the formula



wherein Y is a group of nonmetal atoms necessary to complete a five- to seven-membered ring; X is an oxy radical, alkoxy group, aryloxy group or hydroxy group; R^1, R^2, R^3 and R^4 are independently H or alkyl with the proviso that any two of R^1 to R^4 and Y may be connected to each other to form a 5- to 7-membered ring and wherein the compound has an anionic water-soluble group. The recording liquid contains the hindered amine compound in an amount of at least 0.05-10 wt% and the recording medium contains the compound in an amount of at least 0.01-10 wt% in relation to the total weight of the receiving layer. The ink receiving layer may further contain UV

absorbing agents. See paras. 0012-0013, paras. 0064-0066, compounds (1-1)- (1-7), paras. 0074-0075, paras. 0115-0117, para. 0125, Table 1, Table 3, Tables 5 and 6 and claims 1-5, 7 and 8. The ink-jet ink and/or an ink-jet recording medium containing a receiving layer as taught by Kitamura et al. (US 2003/0070582) appear to anticipate the present claims.

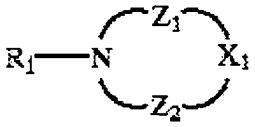
Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

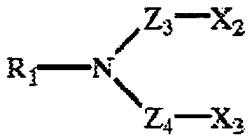
> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. Claims 1-5 and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helling et al.

Helling et al. teach an ink jet system comprising a recording material and at least one colored ink to be applied to the recording material by means of an ink jet nozzle wherein either the material or the at least one colored ink contains at least one water soluble amine compound of the formulae



or



wherein R_1 is alkoxy, aryloxy or hydroxy; Z_1 is C_{1-5} alkylene; Z_2 is C_{1-5} alkylene or $-Z_5-X_4-Z_6-$; Z_3 and Z_4 are C_{1-6} alkylene; Z_5 is C_{1-4} alkylene; Z_6 is a single bond, methylene or ethylene; X_1 and X_4 are –O-, -C(O)-, $-N(R_2)C(O)-$ or $-CH(X_5-R_4)$; X_2 is acyl, acyloxy, acylamino, carboxy, sulpho, phosphoric acid residue, alkoxy, hydroxy or alkyl; X_3 is H or X_2; X_5 is –O- or $-N(R_2)-$; R_2 is H or alkyl and R_4 is acyl and wherein the compound which contain an acid group may also exist as a salt. The alkyl and alkylene groups may be straight chain or branched, substituted or unsubstituted. The compounds can be used either in the ink jet material or in at least one ink jet ink or in both. The total amount of the compound in the material is 10-5000 mg/m^2 and the total amount in the ink jet ink is 1-200 g/l. The ink jet recording material may further contain UV absorbers such as benzophenones or triazines of the formulas A-1 to A-5 and C. See col. 1, line 33 – col. 2, line 36, compounds 1-4 and 1-5, col. 11, lines 22-38, col. 17, line 33 – col. 20, line 15, Examples 1 and 2, col. 25, lines 50-51 and claims 1, 2, 5, 6 and 9-11. Helling et al. fails to specifically exemplify the use of a water-soluble amine compound of the formula as claimed by applicants.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific water-soluble amine compound as claimed by applicants as Helling et al. also discloses the use of these compounds but fails to show an example incorporating them.

Conclusion

The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helene Klemanski
Primary Examiner
Art Unit 1755

HK
January 31, 2005